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DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES



TO:

MARC RACICOT GOVERNOR LAURIE EKANGER DIRECTOR

STATE OF MONTANA

TESTIMONY OF: Todd Damrow, State Epidemiologist, Montana Department of Public

Health and Human Services

The U.S. Senate Committee on Environment and Public Works, Field

Hearing in Libby, Montana

DATE: Wednesday, February 16, 2000

Senator Baucus (and members of the committee {if any are present}), for the record, my name is Todd Damrow. I am the State Epidemiologist for the Montana Department of Public Health and Human Services. I appreciate the opportunity to testify before your committee about our department's involvement in the various state and federal activities underway here in Libby.

On behalf of the Montana Department of Public Health and Human Services, I wish to sincerely thank the federal government for the assistance which they have provided to our department on numerous occasions over the years.

As you might suspect, health care resources in this state are rather limited. Public health workers with the highly-specialized training and expertise needed in Libby are not available in this state. Thus, in these situations it becomes necessary for our department to appeal for help from federal health authorities in order for our residents to be properly served.

Our department has enjoyed a long history of good working relationships in Montana with federal health experts from the Agency for Toxic Substances and Disease Registry (ATSDR). Examples include health effect studies of environmental contamination in Livingston, Phillipsburg, Billings, Bozeman and communities along the Clark-Fork River Operable Unit, our nation's largest superfund site complex. Most recently, ATSDR workers provided invaluable assistance to local and state health workers in response to the train derailment and subsequent chlorine spill near Alberton.

The responsiveness of ATSDR to public health needs in Montana continues to this day, as evidenced by the strong showing of federal health workers on-site in Libby. We are most appreciative for assistance in providing the residents of Libby with the care they expect and deserve.

Our department is currently involved in response activities in Libby in several different ways.

First, the State Medical Officer and the State Epidemiologist have been working closely together with local health officials to assist them in decisionmaking when requested.

Since the public health system in Montana is set up by statute such that local/county health agencies have primacy over health matters in their jurisdiction, the Lincoln County Health Department ultimately has the final decisionmaking authority with respect to public health actions in Libby. State and federal health officials are careful to respect this right of the counties. Just as federal health authorities are here at the request of the state, so state health workers are here at the request of the county.

It has been our experience that county health departments appreciate DPHHS's assistance in decisionmaking, especially when dealing with large federal agencies such as EPA and ATSDR. County health departments are quite understandably nervous about becoming "out on a limb alone" by making decisions in isolation. They recognize the state's experience working with these agencies, and they value our input because of insight obtained from past situations in Montana. We are working closely with the Lincoln County Health Department to help ensure that the decisions made are logical, scientifically defensible, and cost effective.

Close cooperation between state and county health agencies is the norm in Montana. DPHHS has worked hard over the years to successfully establish good, collegial working relations with all of our county health departments, including Lincoln County.

Secondly, the Montana Department of Public Health & Human Services is working closely together with health officials from EPA and ATSDR to assist them in accomplishing their mission in Montana.

Since public health infrastructures and resources vary considerably among states in the nation, federal health workers rely upon state health workers to help them transition to work in the locale. State health department workers are helping to facilitate their work here in every manner possible. We stand firmly united with EPA and ATSDR in efforts to protect the health of the public in Libby.

Thirdly, DPHHS has engaged all personnel and resources within the agency that are able to bear on the situation in Libby. Workers in the department's Bureau of Vital Statistics have provided death certificate data for analysis by state and federal epidemiologists. Similarly, workers with the Montana Central Tumor Registry have supplied cancer incidence data on Libby area residents, and on residents in other areas of the state for comparison purposes.

In an unprecedented action, departmental administrators accessed medicaid claim databases for medical utilization review of current and former residents of Libby that have received medicaid benefits. This action was undertaken in effort to help the federal health workers in their assessment of the current state of the health of the public in Libby.

Lastly, DPHHS has created new partnerships and strengthened old partnerships with other state agencies in response to the incident in Libby.

Health professionals with DPHHS are currently 'on call' to meet with the DEQ incident managers as developments unfold. Face-to-face meetings of workers in DPHHS and DEQ are occurring on a frequent basis to help ensure that state response actions are coordinated and comprehensive.

The Montana Department of Public Health and Human Services is also collaborating with the Montana Office of Rural Health in Bozeman to evaluate and redress unmet needs regarding health care delivery in Libby.

The Montana Office is part of a national network of 50 state offices funded through the Federal Office of Rural Health Policy, under the Health Resources and Services Administration (HRSA). The office in Bozeman serves as the state single point of contact for the Federal Office of Rural Health Policy and HRSA.

The Montana Office of Rural Health and DPHHS gratefully acknowledge the efforts of Senator Baucus in getting the "Medicare Rural Hospital Flexibility Program", Section 4201 of the Balanced Budget Act of 1997 (PL 105-33), through the U.S. Congress.

In Libby, the Montana Office of Rural Health has been working with the County Health Officer, the Administrator of St. John's Lutheran Hospital, and with DPHHS in attempts to secure funding for two very critical unmet needs:

- 1). a clinical coordinator, locally-hired, to work out of the hospital to assist the County Health Officer with medical screening and follow-up of patients in Libby
- 2). telemedicine capabilities for the hospital to allow for teleradiology, pulmonary function telemetry and consulting on patient evaluations and follow-up care.

In closing, the Montana Department of Public Health and Human Services is committed to working closely together with local, state and federal colleagues to ensure that the public health response to the situation is Libby is the best available anywhere.

Thank you Senator Baucus for the opportunity to present this testimony.

2/13/00 Libby, MT.

My name is Brad Black. I hold the position of Lincoln Co. Health officer and have lived and practiced medicine in Libby for over 22 years. As cases of asbestosis surfaced in the area that involved people with non-occupational exposure, our health department began the process of determining where they might have occurred. Communication with Dr. Alan Whitehouse gave indication of at least 23 cases of "non-occupationally" acquired asbestos-related lung disease. These cases included youth recreational exposure, service workers to the mine site, individuals that expanded the ore on their kitchen stoves, loggers who worked timber contracts around the mine site, and a report of one case who had lived in the central area of Libby with no other apparent exposure.

The EPA, led by their coordinator Paul Peronard, arrived and efficiently assessed the concerns. EPA toxicologist Chris Weis and Aubrey Miller, MD were professional in their approach to the situation. Their assessments supported the concerns of widespread asbestos exposure.

We discussed the immediate need to determine if there is current risk of significant asbestos exposure (environmental screen), if there was significant past exposure (medical screen) and the future need to develop the medical infrastructure to provide ongoing follow-up and care of persons with evidence of significant asbestos exposure.

In discussions with our medical providers, there was a consensus that we should take a lead role in providing medical evaluation and follow-up care for those affected with asbestos exposure. The Lincoln Co. Health Board was supportive of St. John's Hospital and medical staff taking an active role in developing the necessary infrastructure. Dr. Whitehouse was consulted and was supportive of us proceeding with this plan.

At this stage, our role appeared to be in assisting the EPA in the medical screening process and to proceed with securing the elements necessary to provide medical care and follow-up.

The ATSDR was engaged and with the direction of Jeff Lybarger, MD, we have continued to proceed with development of infrastructure. There was initially concern locally that the EPA and ATSDR might have some problems in developing a consensus on leadership in this project, however, both groups have demonstrated a level of professionalism that has allowed things to move along in a positive direction. They have come to fulfill their role, but have been listening and responding to state and local input quite well.

Development of the community advisory group is seen as an essential element. I would strongly recommend, in the initial phase of development of this interactive process, that the EPA take a more formal role in facilitation. This could help break down community tensions and help create an environment that participants see as comfortable and respectful of individual rights when discussing differing opinions. Then the group

function can mature to a level that allows it to sustain an independent character.

As environmental screening and medical screening are in progress, we feel that it is essential to be developing a system to receive, evaluate, continue monitoring, and provide all aspects of care for those people with significant asbestos exposure. This would be accomplished with the assistance of expertise offered by Dr. Alan Whitehouse, a pulmonary specialist who is experienced in the clinical course of this tremolite exposure. In addition, it is our interest along with Dr. Whitehouse to investigate the possibility of finding a therapy for the fibrotic process caused by asbestos fibers. The ATSDR represented by Dr. Lybarger has indicated support for a research component.

As we receive the aid of the EPA in environmental screening and the ATSDR in developing a local program that would begin by being involved with the medical screening and continue the process and be ready to receive the identified population, I am concerned we are not going to be prepared. St. John Hospital is in serious need of operational capital in order to take an active role in hiring a local program coordinator, clerks, interviewers and pursuing education for health providers and respiratory therapists to mention a few immediate needs. As a health care community, we are ready and waiting to move ahead. With adequate capital and expertise from consultants, I'm certain we can construct a quality infrastructure.

Previously, Senator Baucus had indicated he would seek some monetary aid for helping our medical system prepare. I am hopeful that he will be successful in this venture.

Also, our role is to continue negotiation with WR Grace to address the long term health care needs of persons affected by asbestos-related disease. This would involve regular monitoring and care with appropriate interventions for those who have been impacted by asbestos exposure.

Respectfully submitted, Brad Black, M.D. Lincoln Co. Health Officer Libby, Montana

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February 16, 2000

Senate Committee on Environment and Public Works United States Senate Washington, D.C. 20610-6175

Dear Committee Members:

I wish to express my appreciation for your consideration and efforts in evaluating the impacts on, and concerns of, the Libby community as we deal with the asbestos issue.

I echo the acknowledgments of others in regard to the Federal and State assistance rendered to date in evaluating conditions and assessing the problem. These efforts will result in public health risk assessments, health screening for asbestos disease presence, and cleanup of known asbestos sources. This process will go a long way toward alleviating the immediate health concerns and anxieties harbored by the community.

However, asbestos (and it's impacts) presents a long term issue. Asbestos does not readily deteriorate in the environment, and exposure to its fibers can take many years to develop into a debilitating or deadly affliction. It is inconceivable to assume the efforts currently being expended in response to the asbestos conditions in Libby will result in a 100% cleanup of all asbestos risks. Long term planning is proceeding for personal health issues associated with asbestos presence in our community. These include: screening, long term care, and research efforts.

In order to rebuild, and maintain, citizen and visitor confidence in the Libby environment it will be necessary to maintain an ongoing environmental asbestos monitoring program. This program must address ambient and indoor air quality, drinking water, and source sampling (dirt, insulation). As people remodel houses, dig up yards and gardens, and transfer real estate, new asbestos sources and concerns are going to be uncovered. People will need to have a local agency to assist them. The Lincoln County Environmental Health Department has experienced staff personnel that deal with air and water monitoring programs regularly. Asbestos training and appropriate monitoring equipment will allow our department to expand its role and provide this service. It is also logical that we'd assume the role as the educational outlet for asbestos related topics, when the EPA Libby "storefront" information center is phased out.

The scope of these long range community needs falls beyond the current EPA and State

efforts. These needs will require extended funding, and that leads me to the basis of my request. The citizens of the Libby community need your assistance in providing a means for sustained and assured long term funding to provide these essential environmental programs. Assurance, and reassurance, that the local environment does not pose a public health risk is critical to the healing and rebuilding process facing the citizens of the Libby community.

I am appreciative of your efforts and concerns and again express my thanks to you.

Sincerely,

Ronald L. Anderson, Director

Lincoln County Environmental Health

DEPARTMENT OF ENVIRONMENTAL QUALITY



MARC RACICOT, GOVERNOR

STATE OF MONTANA

TESTIMONY OF: Mark Simonich, Director of the Department of Environmental

Quality

TO: The U.S. Senate Committee on Environment and Public Works,

Field Hearing in Libby, MT

DATE: February 16, 2000

I appreciate the opportunity to explain to the committee the department's involvement in the various local, state and federal actions that are presently occurring in Libby, MT.

To understand the Department of Environmental Quality's (DEQ) involvement in the Libby investigation, it is helpful to know a little about the department. DEQ was created in 1995 by the Montana Legislature based on the recommendations of a Blue Ribbon Task Force appointed by Governor Marc Racicot.

The DEQ combined nearly all the environmental regulatory programs from the former Departments of State Lands (DSL) and Health and Environmental Sciences (DHES), and the energy programs in the Department of Natural Resources and Conservation (DNRC).

The DSL programs regulated the operation and reclamation of hard rock, coal and open cut mines throughout the state.

The environmental health programs formerly administered by DHES have a clear public health focus because of their ties to the Water Quality Act, Air Quality Act and other similar public health oriented laws.

At the time of reorganization, county health officers from throughout the state expressed concern that moving the environmental health programs out of the health department into an environmental regulatory agency would result in the loss of their public health focus. The Racicot Administration stressed then, as it does today, that public health will remain a primary focus of the DEQ.

The DEQ's mission is to protect, sustain, and improve a clean and healthful environment to benefit present and future generations.

Today the DEQ administers more than 25 environmental laws. These laws address all facets of air quality and water quality (including regulating public water supplies and

wastewater systems), as well as various laws relating to the development of natural resources (hard rock, coal, and open cut mining), disposal of solid and hazardous wastes, and cleaning up old areas of contamination (abandoned mines, petroleum contamination and Superfund.)

DEQ has an authorized staff of 400 persons and a biennial budget of approximately \$136.8 million. More than half of its budget comes from state special revenue accounts (including fees - 59.5%), a little over a fourth from the federal government (26.6%), and lesser amounts from the state Resource Indemnity Trust (8.5%) and the state general fund (5.4%).

In forming the DEQ, I have tried to instill a new vision. While it is true, by our very nature we are a regulatory agency, I truly believe we can accomplish more by working together. My vision is that DEQ will work cooperatively with the public, including regulated entities, and other government agencies to find solutions to the environmental challenges we face, such as those challenges in Libby.

The DEQ is involved in the Libby investigations on several levels. The department is directly responsible for a request to release the final bond at the former mine site under the Montana Metal Mine Reclamation Act (MCA 82-4-101 et seq) (MMRA). Additionally, the DEQ is responsible for enforcing federally delegated air quality, water quality, public water supply, and hazardous waste disposal laws. The department also is responsible for working cooperatively with local and federal agencies to ensure the people of Libby have a clean and healthful place to live.

Vermiculite was discovered in 1881 at Vermiculite Mountain, approximately six miles northeast of Libby, in the Rainy Creek drainage, by miners hoping to discover gold. Its unique properties were recognized by Edward Alley in 1919, and in the 1920s the Zonolite Company was formed and began mining vermiculite. In 1963, W.R. Grace bought the mine. The mine closed in 1990.

At times during the operation, the vermiculite mine produced up to 80% of the world's supply of vermiculite. It has been used in building insulation and as a soil conditioner. Unfortunately, the vermiculite ore from the Libby mine contained an associated waste rock that included a particularly toxic form of naturally occurring asbestos referred to as tremolite¹.

Passed in 1971, the MMRA acknowledges that mineral mining in Montana is a basic and essential activity that makes an important contribution to the state's economy, but at the same time, proper reclamation of mined land and former exploration areas is necessary to prevent undesirable land and surface water conditions that would be detrimental to the general welfare, health, safety, ecology and property rights of the citizens of the state. At the time the act was passed, almost 320 acres of land at the vermiculite mine were

¹ In the rest of this testimony, tremolite may also be referred to as tremolite-actinolite based on EPA's choice of definition for this project.

already disturbed and mine tailings were being discharged down the slopes of the mountain into the Rainy Creek drainage.

DEQ has been involved at the mine site since the early 1970s when the Clean Air Act of Montana was passed. A series of 10 air quality permits were issued to W. R. Grace over the years for various pieces of air pollution control equipment and operations, including milling, concentration, drying, screening, storage, loadout, and bagging. The permits regulated primarily particulate emission and opacity limitations. Asbestos is a particulate, but was not regulated separately from total particulate probably because there was, and still is, no federal or state ambient air quality standard for asbestos. The permits were revoked in 1992 after completion of operations. A file review of air quality inspections of the operation indicated general compliance with the exception of one minor opacity violation at the dryer stack.

W. R. Grace applied for a permit to discharge wastewater to Rainy Creek in February 1971. In 1973, the company changed from dry beneficiation of the ore to a wet process with a subsequent increase in the discharge of process water. It received a permit in March 1971, which was extended in November 1971. The permit expired in January 1972. At that time the company had completed construction of the tailings impoundment, which the department considered a no discharge facility and no longer required a Montana Pollutant Discharge Elimination System (discharge) permit.

The impoundment does have an underdrain, which has been sampled. The level of pollutants is within water quality standards so a permit is not needed for the underdrain.

The impoundment has a spillway that discharges asbestiform fibers during high flows. The discharge over the spillway may require a discharge permit, but state Water Quality Bulletin-7 (WQB-7) limits for asbestos fibers may or may not apply. Sampling and health risk assessments in 2000 will evaluate the need for a permit and whether Rainy Creek needs to be diverted around the impoundment during high flows to prevent a discharge of asbestiform fibers.

The following is a brief summary of the mine's permitting, bonding and bond release history under the MMRA:

- ➤ W. R. Grace applied for an operating permit from DSL in November 1971. Bond was set at \$100/acre on the original 320 acres of disturbance. Operating Permit 00010 was approved in January 1972.
- ➤ In July 1977, December 1978, August 1979, July 1986 and September 1992, the operating permit was amended. The bond eventually increased to \$472,000 for 1,004 acres of disturbance in the 1,200-acre permit boundary.

As areas were mined out, concurrent reclamation commenced.

- After a legal notice was published requesting public comment, a partial bond release was approved on 14 acres in August 1988 and the bond was reduced to \$467,242 for 990 acres of disturbance in the 1,200-acre permit boundary.
- Mining ceased in September 1990, and final reclamation commenced. A final closure plan for the impoundment area was approved in September 1992 after a legal notice and environmental assessment were published and a public meeting was held in Libby.
- After a legal notice was published, a second partial bond release was approved in September 1994. Reclamation of the entire mine site, according to the approved plan, was completed. The bond was reduced from \$467,242 to \$66,700 for 740 acres of disturbance in the 1,025-acre permit boundary. The bond was held for maintenance of the reclaimed areas. The bond was no longer needed on the 160 acres released from Operating Permit 00010 for the tailings impoundment. These acres are now regulated under a Montana DNRC Dam Safety Section operating permit (Application No. 1470A) which was approved December 1994.
- ➤ In December 1994, the Kootenai Development Corporation (KDC) purchased the property and assumed the operating permits and bond. KDC has continued to maintain the site since 1994.
- After the public notice process was completed, a third bond release was approved in September 1997 reducing the bonded acreage in the permit area of 125 acres because vegetation on reclaimed areas continued to improve. The bond for maintenance of the reclaimed acreage remained the same on the 125 acres at \$66,700.

DEQ's involvement in Libby continued through June 1999 when the current owners of the former vermiculite mine, KDC, requested a final bond release for the property. The department agreed to publish the bond release request, and after a public comment period, decide on whether the bond release was appropriate or whether more work and monitoring were needed. A new public notice process was approved by the legislature in 1999 requiring a legal notice published throughout the area and a press release for statewide media coverage. As a result, a request for public hearing from Lincoln County Commissioners was received. DEQ immediately agreed to conduct the hearing and coordinated all phases of the hearing with the local officials.

The DEQ held a public hearing in Libby to record comments on the proposed bond release on December 1, 1999. The department announced it would accept written comments to January 1, 2000.

The DEQ will respond to individuals who have raised concerns by mid-February. The responses address the entire 1,200-acre mine site, not just the 125 acres in the bond release request. The responses also address other possible health related issues resulting from vermiculite ore that left the mine site and was processed in Libby as well as in other

locations throughout the country. A decision on the bond release will not be made until a thorough site review is completed by the department later this year.

While focused on the MMRA, the department's review will also ensure that the entire mine site, access roads and streams in the Rainy Creek drainage are in compliance with state environmental health laws. This review will be coordinated with local, state and federal plans and include:

Air and water quality sampling will be done at the mine.

An air quality monitoring program will document the level of dust and fibers blowing off the entire site.

A tailings and waste rock sampling program will document the levels of asbestos in the materials at the mine site. DEQ knows the materials contain at least an average of 5-7% tremolite based on a Montana Department of Commerce publication from 1990. Water in the mine area will be sampled to identify the level of asbestiform fibers. Based on the results of the materials sampling and the results of the air and water sampling programs, decisions will be made on the amount of reclamation still needed at the mine.

- Data collected in the early 1990s and again in 1999 indicate that asbestos levels in road materials in parts of the Rainy Creek road were elevated. Although there is no air quality standard for asbestos fibers along the road, new information indicates that dust on the Rainy Creek road may produce a continuing health hazard. Dust sampling by Lincoln County officials and W. R. Grace in 1991 and 1992 indicated that dust levels along Rainy Creek road did not exceed standards based on the sampling method used at the time. Rainy Creek road is a county road that passes through U.S. Forest Service land and some land now owned by KDC. The DEQ will reevaluate sampling conducted along Rainy Creek road in the early 1990s and review the new data. Only a small portion of the road was within the old mine permit boundary. If there is a health risk, DEQ will coordinate with local and federal officials to address the road issue.
- The former DHES and W.R. Grace set up a water quality monitoring program in the early 1990s. Concerns were expressed again in 1999 about levels of milling reagents (diesel, fluoride) in the water in the impoundment as well as asbestiform mineral fibers in the impoundment water. The DEQ re-sampled some sites again in September 1999. The only exceedance of any water quality standard at any sampling station was asbestiform mineral fibers in the tailing impoundment. The department plans to re-sample Rainy Creek and its tributaries during high runoff in the spring when the spillway from the impoundment is flowing. If the level of fibers is above acceptable levels (the ambient water quality standard for drinking water is 7 million fibers per liter in WQB-7), the DEQ will work with the DNRC Dam Safety Program and local and federal officials to address the issue.

The Rainy Creek drainage historically has been impacted by mine waste products since the 1920s. Rainy Creek downstream from the location of the drinking water intake for the mine/mill (lower Rainy Creek) was classified as an impaired (C-1) stream in 1971. Upstream of that point it is classified B-1. The other waters in the Rainy Creek watershed and the Kootenai River are classified B-1. While B-1 waters "are suitable for drinking, culinary and food processing purposes, after conventional treatment; . . ." (ARM 17.30.623), C-1 waters are not suitable for drinking and should not be used for that purpose (17.30.626). As a result, no one uses the water in Rainy Creek or its tributaries for drinking water. The impoundment was constructed in 1971 to contain the mine wastes. Rainy Creek water quality is probably better today than it has been for more than 50 years. Risks from old tailings in the drainage below the impoundment will also be evaluated in 2000.

- ➤ W. R. Grace and KDC were given permission to dispose of certain solid wastes on site in a landfill. This is allowed under the MMRA as long as the disposal meets Montana solid waste regulations. Materials that were allowed to be buried on site included inert wastes such as concrete. W. R. Grace was also allowed to bury steel and asbestos shingles. Concerns have been expressed about how deep it is to ground water and if that ground water is contaminated by anything that may have been dumped illegally. DEQ plans to sample an abandoned well on the site to address this issue. The depth to water in the well is more than 200 feet deep. More wells will be installed if the old well is not located in an appropriate monitoring location. Reclamation of the disposal site will be reevaluated.
- Concerns have been expressed about future development of the mine site. The concern is that new development will introduce more asbestiform mineral fibers in the air and water. DEQ will coordinate with Lincoln County and federal officials to identify controls needed on the old mine site to limit potential problems with future development proposals.
- Concerns have been expressed that because the bond has been released on the majority of the site and because the land has been sold to KDC, that W. R. Grace is not responsible if air or water quality problems are identified. W. R. Grace has been cooperating with local, state and federal officials to address the issue. Any necessary cleanup will be conducted under the MMRA, Clean Air Act, Water Quality Act, Comprehensive Environmental Cleanup and Responsibility Act (state Superfund) and Comprehensive Environmental Response, Compensation, and Liability Act (federal Superfund), as needed.

In response to the widespread concerns of possible asbestos contamination in Libby, the DEQ sampled five public and private wells to check for ground water contamination from asbestos. The samples revealed no contamination. The sites included mobile home courts and a plant nursery operating in a former vermiculite screening facility.

City personnel had previously sampled Libby's public water system and found no

asbestos contamination. However, DEQ decided to sample the system again to verify the initial findings. The city gets its drinking water from Flower Creek, which is geographically in a different drainage from the vermiculite mine. No asbestos contamination has been reported in that drainage.

Earlier this month the DEQ announced the sample results revealed there was *no* asbestos in the samples taken from the city's water supply. One sample was taken from untreated water entering the treatment plant. A second sample was taken from the finished (filtered) water leaving the plant. Copies of the results were sent to the City of Libby, the Lincoln County Sanitarians Office, and the EPA Office in Libby.

Time and cooperation are the keys to answering the many environmental and public health questions in the Libby area.

Time is an important factor because it took time for the situation in Libby to develop and it will take time to identify and address any environmental and public health problems. Time is also a factor in determining the current investigation's impact on Libby's economy, tourism, business community and its citizens. If testing reveals environmental exposures still exist, it will take time to clean up or stabilize those sites. The result, however, will be an environment safe for people, in addition to being attractive for economic development, existing businesses and people visiting the area.

As for cooperation, when it became apparent that asbestos concerns ranged far beyond those associated with the request to release the bond at the mine, I immediately formed a group of DEQ employees to work on the proposed bond release and asbestos investigation. The group includes: the person in charge of reviewing the proposal to release the bond, a project coordinator to work with EPA on the environmental health investigation, the DEQ's media manager and a project coordinator from the Director's Office to work with EPA and local, state, and federal public health officials. Additionally, these DEQ persons are drawing on the expertise of a number of persons throughout the department.

The DEQ and EPA investigation of possible asbestos contamination in the Libby area began with sampling in December 1999. The team collected air, soil (yard, garden and driveway samples), dust and vermiculite insulation samples. Samples were taken at 32 residences, as well as several potential areas of concern due to historic vermiculiterelated activities.

To date, the state and federal team's investigation includes:

Approximately 73 air sample results from 32 residences, two businesses, and two former processing areas were received and reviewed. Transmission electron microscopy analysis was used to count asbestos fibers (10-grid system count looking for fibers 5 microns or greater).

- > Results from the December air sampling event were released on January 31, 2000. Preliminary results indicate that two potential areas have relatively elevated levels of asbestos related fibers in the 5-10 micron range.
 - Two homes have elevated levels of asbestos fibers. Chrysotile (serpentine asbestos) was detected in one home and tremolite-actinolite fibers were detected in the other home. (The chrysotile is not related to the old vermiculite mine)
 - The two former processing areas with elevated levels of tremoliteactinolite asbestos fibers present are the lumber facility at the former export plant and the plant nursery (Parker business and residence) at the former screening facility.
 - ▶ Of the remaining homes, 24 have trace levels of tremolite fibers. However, to make sure nothing was missed, these same samples were sent back to the laboratory to be re-tested with a more stringent analysis (lower detection limit) looking at fibers from 5 − 10 microns in length using a 30 grid count system. Results are anticipated by the end of February or early March.
- The other samples taken during the December sampling will be available in mid-March. These results, along with the air sampling results, will provide a better assessment of the extent of any contamination in residential homes and businesses. These data, along with future residential and business sampling will allow the agencies to determine the best possible solutions.
- > The team also installed ambient air monitors at four locations in Libby to detect asbestos fibers in outdoor air.
- ➤ EPA opened a field office (the Storefront, 501 Mineral) in Libby. The office is being shared with DEQ and other state and federal agencies. The office is open from 8:30 a.m. to 5 p.m. every day except Tuesday. Tuesday it is open from 12 noon to 8 p.m.

The environmental and public health sampling and monitoring will determine if there are problems, and, if so, how severe. Based on that information, appropriate local, state and federal agencies will, after considering public review and comment, determine what needs to be done. It is at this point decisions will have to be made regarding any responsible parties and where the money should come from to pay the costs of any cleanup or stabilization activities.

The agencies involved with the investigation are still in the sampling and monitoring phase of the investigation.

So, where does the responsibility lie for the asbestos contamination and health problems in the Libby area? It will take time and patience to answer these questions. Based on the

anticipated scientific, technical and medical investigation results, these questions must and will be answered carefully and thoughtfully. In the meantime, the DEQ along with its local, state and federal partners will do their best to administer their respective environmental and public health laws.

With respect to DEQ, if there are violations of the law and a responsible party can be identified, the department will expect the responsible party to take full responsibility for its actions. However, from the DEQ's perspective, the highest priority is identifying and eliminating sources of asbestos contamination that pose a health risk to the public.

Based on the sampling results, the health officials involved will be preparing a health risk assessment to identify the risk of exposure from varying times and doses of exposure in the area that have created the levels of asbestosis observed in the Libby area. Areas exceeding the risk thresholds will be cleaned up. Other areas may simply need to have land use restrictions placed on them to limit risks to acceptable levels. These decisions must be made based on sound scientific data.

Thank you, Senator Baucus, for the opportunity to present this testimony.

Henry Falk, M.D.

Assistant Administrator,

Agency for Toxic Substances and Disease Registry

Public Health Service

U.S. Department of Health and Human Services

Before the

Environment and Public Works Committee

U.S. Senate

February 16, 2000

Good day, I am Dr. Henry Falk, Assistant Administrator of the Agency for Toxic Substances and Disease Registry (ATSDR), a public health agency within the U.S. Department of Health and Human Services (DHHS). Accompanying me is Dr. Jeffrey Lybarger, Director of the Division of Health Studies at ATSDR. ATSDR appreciates the opportunity to evaluate to the public health issues in the Libby, Montana, area in response to concerns expressed by key elected officials such as you, community members and former mine workers. ATSDR, with the support of other federal, state and local organizations, will carry out the activities to meet the public health needs of the community in Libby, Montana.

Dr. Lybarger and I, along with ATSDR and DHHS staff, share your concerns about the health issues being raised in Libby, and share your desire to develop immediate and long-term steps to address those issues. Among the activities ATSDR will pursue in Libby are providing advice and guidance on environmental sampling; reviewing medical and vital records for residents already diagnosed with asbestos-related disease; developing protocols for medical testing which will begin later this spring; developing and distributing health care provider and community education materials; and providing relevant training to health care professionals who may need to provide services to residents and workers in the Libby area.

ATSDR's mandated activities and expertise enables provision of these public health activities in the Libby area. ATSDR was created by Congress in 1980 under the

Comprehensive Environmental Response, Compensation, and Liability Act as amended (CERCLA), or what is more commonly known as Superfund legislation. CERCLA mandates of ATSDR a broad, national program of Superfund site health assessments, health investigations, surveillance and registries, applied research, emergency response, health education, and toxicological database development. Broadly speaking, ATSDR's responsibilities under Superfund, the Resource Conservation and Recovery Act (RCRA), and other federal statutes are to assess the effects of toxic substances on community populations and to recommend interventions to protect public health where they are needed. This may include medical screening and epidemiologic investigations of health effects of community populations exposed to hazardous substances. We also conduct investigations to measure human exposure to toxic substances released from waste sites or other sources of release. Our work is conducted in close collaboration with the U.S. Environmental Protection Agency (EPA), state health departments, local health agencies, and affected communities.

ATSDR administers public health activities through: state partnerships; public health assessment and consultation activities; exposure investigations; health studies and registry activities; development of toxicological profiles and attendant research; emergency response; health education and health promotion; and community involvement. In general, ATSDR organizes its site-related activities by developing Public Health Response Plans. A Public Health Response Plan identifies appropriate public heath activities, designates who is responsible for the conduct of the activities,

and provides an estimated time line for accomplishing those activities in the community.

All stakeholders, including officials and the affected community, provide input throughout the Response Plan process.

Libby-area asbestos description and background:

From 1920 - 1990 a vermiculite mine and two refining facilities were located in the Libby area. Natural vermiculite ore and its products can be contaminated with asbestos. The vermiculite ore mined at Libby has been shown to be contaminated with asbestos, and the degree of contamination is under investigation.

Reported health concerns: In the past, asbestos-contaminated dust may have been spread in the course of operations of the facilities through emissions from the refining process, via disposal operations, through product shipping and use, and on miners' clothing. Studies published by the National Institute for Occupational Safety and Health (NIOSH) at the Centers for Disease Control and Prevention (CDC) in the mid 1980s documented asbestos exposure and related health effects, including respiratory and lung ailments, in workers at the Libby vermiculite facilities. Truck drivers, railroad workers, forestry service workers, and others who provided services and support to the mining operations may have been exposed to asbestos-contaminated dust during their daily work activities. ATSDR will consider other ways that residents in the area might have been exposed to asbestos including children playing with vermiculite, recreational activities near the mine, insulation in homes, or other activities and situations reported

by the community.

ATSDR's primary objectives for public health activities in Libby, MT, are to: identify the people at health risk from exposures to asbestos, evaluate the association between exposures to asbestos and health effects in the community, conduct an epidemiologic investigation to assess the full scope of health effects in the past and present, and to intervene to eliminate exposures and prevent further adverse health effects in the community.

Health effects associated with asbestos: A significant potential health concern with vermiculite is the degree to which it may be contaminated with asbestos. Vermiculite alone can cause irritation to the respiratory system (nose and throat), but it does not represent the threat to health that it does when in combination with asbestos.

The <u>amount</u> and <u>duration</u> of exposure to asbestos determine the risk for adverse health effects. Breathing high levels of asbestos may cause several severe adverse health effects. **Asbestosis** is a serious disease that results in a slow build up of scar-like tissue within the lungs. People with asbestosis have shortness of breath, often along with a cough and sometimes heart enlargement. Less severe, but important in assessing exposure to asbestos are changes in the lining of the lung which are quite common in workers heavily exposed to asbestos. When exposure to asbestos causes scarring to the lining of the chest wall surrounding the lungs, these areas are called **pleural plaques**. They are often not associated with symptoms, but they do indicate

that asbestos exposure has occurred and that the person can be at risk of other, more serious, asbestos related conditions.

Exposure to asbestos has been related to two types of cancer. The first is **lung** cancer. Studies of workers exposed to asbestos have demonstrated higher rates of lung cancer; interactions between cigarette smoke and asbestos increase the chances of getting lung cancer. The second type of cancer, which is highly associated with asbestos exposure is **mesothelioma**. This cancer is extremely severe, and is more common in workers, although it has also been reported in non-workers with apparently limited exposures. Smoking plays no role in risk for mesothelioma. Studies of workers suggest that breathing asbestos can also increase the chances of getting cancer in other parts of the body, although less frequently.

ATSDR involvement

Since November 1999, ATSDR and DHHS Region VIII staff in Denver, CO, have consulted with EPA and county health officials on environmental sampling of mining waste and interpretation of the environmental data with respect to potential health effects.

ATSDR has worked with the Libby community and local, State and other Federal officials to identify key elements of a Public Health Response Plan to address the public health needs of the community.

ATSDR initiated site activities with a site visit from January 18 to January 21, 2000, in Libby, MT. The site visit by ATSDR and DHHS regional staff allowed the review of current public health environmental actions; gathering of environmental data, health data and community concerns; and meetings with relevant parties to formulate an action plan. ATSDR staff met with officials of EPA, the Montana Department of Public Health and Human Services (MDPHHS), the Lincoln County Commissioners and Department of Health, St. John's Lutheran Hospital, and a key local physician who has seen and diagnosed individuals with asbestos-related illnesses. During this visit, ATSDR and the State and local health officials initiated discussions to address the public health needs of the community.

During a follow-up site visit February 2-9, 2000, DHHS regional and ATSDR staff worked with State and local health officials to outline future public health activities in a Public Health Response Plan. Key elements of the overall Public Health Response Plan for Libby, MT, are to:

- 1) provide input and advice on environmental sampling being done by EPA to better understand patterns of exposure;
- 2) collect and analyze medical and epidemiologic data to better characterize the nature and extent of asbestos-related disease in the community (this would involve review of medical, pathology, and vital records data for residents of the Libby area who have already been diagnosed with asbestos-related disease);

- 3) coordinate medical testing for people in the community who have had past exposures to asbestos in order to identify people with asbestos related conditions so they can be referred for medical care; and
- 4) provide a public health education program to assist residents and health care providers in obtaining full and up-to-date information on asbestos-related risks and diseases.

Medical testing and referral: Medical testing to identify the extent of the site-related adverse health effects is a key component of the Libby Public Health Response Plan. Planning to provide medical testing to persons who lived or worked in Libby during the time of highest exposure is ongoing. The medical testing will provide screening services and advice on diagnosis and long-term care needs, where appropriate, for people who were exposed to asbestos; estimate the prevalence of asbestos-related conditions in people who might have been exposed; and assist the local health department and local physicians to estimate the magnitude of asbestos-related illnesses that must be addressed by local physicians. Under this plan, people who lived near the site, worked with vermiculite, lived in a household with a vermiculite worker, or had some other activity which allowed them to have frequent contact with the vermiculite in the Libby area, would be identified and included in the medical testing plan. People who meet the designated criteria will be scheduled for a chest x-ray and will be asked to complete a detailed questionnaire. The x-rays will be reviewed by expert radiologists and the results will be provided back to the participants. People with

abnormalities associated with asbestos will be notified, counseled and offered additional lung function tests and radiographic procedures, along with referral to their physician. People who do not have a physician will be referred through a system coordinated by the local health department. We currently estimate that as many as 3,000 people would meet the criteria for testing and desire to be tested.

A written project plan, as described above, is currently being formulated and will be submitted for independent review by a panel of physicians and health scientists with expertise in asbestos-related diseases. We anticipate this review will occur by the end of February 2000. We hope to begin medical testing within two to three months. The Health Resources and Services Administration (HRSA) has already committed \$80,000 toward the medical testing program.

Health education, communication and community involvement: ATSDR's health education and promotion program encompasses the overall goals of educating individuals, communities, and health-care providers about the health effects of hazardous substances in the environment; working with affected communities to develop and promote public health strategies to mitigate the health impact of hazardous substances; and disseminating environmental health education materials, training, and information.

To date, local public health professionals (physicians and nurses) have been contacted to enable ATSDR to better understand local health-related concerns; community

involvement specialists in the various represented organizations (including EPA, ATSDR, and the state health department) have begun developing strategies for clear, effective message delivery; and contact lists are being developed to ensure that affected and interested parties in the Libby area receive information that is disseminated. Further, ATSDR is working with EPA to discuss mechanisms, such as a community-based group, to obtain regular and consistent community input to the development and implementation of the Public Health Response Plan.

A key part of ATSDR's health promotion program is education and training for health care providers and other health professionals, to facilitate access to environmental medical services, and to establish the connection between environmental public health practice and long-term health care. An integrated health care provider education plan is being developed that will target primary care physicians as well as community health nurses, x-ray technicians, respiratory therapists, and other health-related professionals who interact with people who may have been affected by Libby-area contamination.

ATSDR staff are currently working with local partners to plan a community meeting in Libby. The idea is to create an environment for individuals to talk directly with scientific, environmental and health experts at "information kiosks" about their health-related questions and concerns. The public availability session is expected to be held within in the next month and before the medical testing activities begin.

I would like to reiterate that ATSDR shares your concerns about the situation in Libby – both the environmental contamination and the health concerns. I am confident that the expertise of the ATSDR staff and its partners, working through the integrated Public Health Response Plan, can address both short- and long-term public health needs of the community.

ATSDR continues to provide input and advice on environmental sampling; is reviewing medical and vital records for residents already diagnosed with asbestos-related disease; is developing protocols for medical testing to commence later this spring; and developing health care provider and community education materials for use in this response. Each of these activities are in collaboration with other federal, state, and local agencies. Our efforts will result in an integrated program to address the health concerns of prior and current residents of Libby and the surrounding areas. The community's concerns about the environment and its impact on their health can be addressed only if we continue to work in the collaborative manner that staff of the federal, state, and local agencies involved in this response have already begun.

WRITTEN TESTIMONY OF WILLIAM YELLOWTAIL, REGIONAL ADMINISTRATOR OF US EPA REGION VIII,

ON THE LIBBY ASBESTOS SITE

LIBBY, LINCOLN COUNTY, MONTANA

BEFORE THE

ENVIRONMENT AND PUBLIC WORKS COMMITTEE

UNITED STATES SENATE

16 February 2000

I would like to thank the Senate Committee on Environment and Public Works for inviting me to offer testimony concerning the asbestos situation in Libby, Montana. This is a most serious matter. My staff and I have given it our utmost attention. EPA Region 8 will complete the investigation it is conducting in Libby with all due speed and thoroughness - as a top priority. After providing a brief background about the Site, I will discuss five topics:

- 1. The Agency's recent actions at the Site.
- 2. What we know of the extent of asbestos related health effects in Libby.
- 3. What we know of the current state of the environment in Libby.
- 4. The next step's to be taken by EPA and other Federal agencies at the Site.
- 5. Coordination of State, Local, and Federal efforts.

Background

Mr. Edward Alley began initial mining operations on a vermiculite ore body located approximately 7 miles northeast of Libby, Montana in the early 1920's. Full scale operations began later that decade under the name of the Universal Zonolite Insulation Company (Zonolite). Scientists didn't know the health ramifications at the time, but it was known that this ore body contained amphibole asbestos of the tremolite-actinolite series. Unlike, the commercially exploited chrysotile asbestos, the tremolite-actinolite material has never been used commercially, and was considered a contaminant. Uses of vermiculite include a variety of insulation products and construction materials, as a carrier for fertilizer and other agricultural chemicals, and as a soil conditioner.

Operations at the mine were fairly simple. Miners strip-mined the ore using conventional equipment and then processed (beneficiated) it in an on-site dry mill to remove waste rock and overburden. After beneficiation, workers trucked the processed ore down Rainey Creek Road to a screening plant, which separated the milled ore into five size ranges for use in various products. From there, shippers sent the material across the country, predominantly by rail, for either direct inclusion in products, or for expansion (also known as exfoliation). Heating the ore in a dry kiln to approximately 2000 °F boiled the water trapped in the crystalline matrix of the vermiculite and expanded the material by a factor of 10 to 15 fold.

In Libby, operations handling the beneficiated material occurred at four main locations: the Mine and Mill located on Rainey Creek Road; the Screening Plant and Railroad Loading Station located astride the Kootenai River at the intersection of Rainey Creek Road and Highway 37; the

Expansion/Export Plant located off Highway 37 where it crosses the Kootenai River; and an Expansion/Export Plant located at the end of Lincoln Road, near 5th Street.

In 1963, the W.R. Grace Company bought the Zonolite Company and continued operations in a similar fashion. Grace added a wet milling process to the operation in 1975, which operated in tandem with the dry mill, until the dry mill was taken off line in 1985. Expansion Plant operations ceased in Libby sometime prior to 1981, although workers still used this area to bag and export milled ore until mining operations were stopped in 1990.

1. The Agency's Recent Actions

On Monday, November 22, 1999, I made the decision to send to Libby an On Scene Coordinator from my Emergency Response Program, along with a team of scientists, toxicologists, and a physician from the Public Health Service (PHS) to investigate the situation. They arrived in Libby on November 23, 1999.

The initial investigation consisted of the following: a brief inspection of the former mine and processing facilities; interviews with local officials and some members of impacted families; an interview with a pulmonologist in Spokane, Washington who specializes in the treatment of asbestos related diseases; and the collection of a small set of environmental samples.

This investigation confirmed two things. First, there is a large number of current and historic cases of asbestos related diseases centered around Libby, Montana. The pulmonologist in

Spokane was currently treating over 200 cases of asbestos related diseases among folks who had either lived in Libby or worked at the mine, and had provided care to dozens more who had already died. Most disturbing of this physician's cases were 33 incidents of apparently non-occupational exposures. Of these 33, six had no family or other ties to anyone working at the mine. The interviews conducted by the Team identified additional people who were either sick or had died from asbestos related diseases. The Team also obtained a number of court documents stemming from the large number of asbestos related lawsuits in Libby which provided background information about the Site.

The second thing our investigation confirmed was the high likelihood that significant amounts of asbestos contaminated vermiculite still remain in and around Libby. High concentrations of tremolite-actinolite asbestos remain in the ore body, tailings pile, and tailings pond at the former mine itself. In addition, visible piles of unexpanded vermiculite remain at the former screening plant/ railroad loading station, and the base material of Rainey Creek Road appears to contain tailings and sands from the mine. Residents stated that piles of expanded and unexpanded vermiculite used to sit at the former Expansion/Export Plant, next to two former youth baseball fields. They indicated that children regularly played in and around these piles, including the current Governor of Montana. Local residents commonly used both expanded and unexpanded vermiculite from waste piles around the mining operations in their yards and gardens as a soil conditioner, and the expanded vermiculite was used as wall and attic insulation in many homes. Descriptions of historic operations of the mine, mill, and processing centers indicate that large amounts of dust and other fugitive emissions were released into the environment when these operations were still running.

These findings led EPA to initiate a larger scale investigation with three overall goals:

- 1. Determine the current distribution of asbestos contamination in Libby.
- 2. More accurately determine (in conjunction with the Agency for Toxic Substance and Disease Registry (ATSDR), the Montana Departments of Environmental Quality (MDEQ) and Public Health and Human Services, and PHS) the extent of asbestos related health impacts in Libby.
- Distinguish the effects from past asbestos exposures from any that might be on-going currently, or may occur in the future.

In December 1999 EPA collected samples of air and dust from inside 32 homes and 2 businesses around Libby, and collected samples from yards, gardens, insulation, and driveways at these same locations. In addition, air and soil samples were collected from the former screening plant and railroad loading station, as well as at the former expansion/export plant. Samples were also collected from along Rainey Creek Road. To date, EPA has collected over 600 samples. Seasonal sampling of ambient air around Libby and the former mine Site began in January, and will continue through this Fall.

In December, EPA contacted the ATSDR to begin planning a wide scale Community

Medical Testing and Exposure Assessment. This effort will make chest x-rays, and where
indicated, follow-up pulmonary evaluations available to residents and former residents of the
Libby area, as well as to former mine workers and their families. This effort should help
determine the full scope of the asbestos- related medical impacts in Libby and, in conjunction with

the on-going environmental sampling, help distinguish between past and current sources of exposure. The medical testing is planned for start-up this Spring.

2. What We Know About Asbestos Related Health Effects in Libby

It is very apparent that the asbestos-related health effects associated with the vermiculite mining and processing operations in Libby have been significant. Although we will likely never be able to confirm the exact number of cases, it is probable that the number of cases and deaths reported in the media are in the right range. The vast majority, well over 80% of cases that EPA and PHS have reviewed, appear to be occupational in nature. The next largest group appears to be family members of those involved in the mining operations. Beyond the occupational and secondary exposures (e.g., exposure to workers' families), it is difficult to identify the sources for other asbestos-related diseases, and whether they still exist today. It is probable that people who played in the piles or lived near the former expansion/export plant when it was in operation are at greater risk, but this has not yet been confirmed by a rigorous investigation. EPA has not yet concluded whether or to what extent having this vermiculite in a home garden, in a yard, or as wall or attic insulation correlates to an increased incidence of asbestos related disease. It is these latter two questions which form the crux of the on-going investigations.

3. What We know About the State of the Environment In Libby Today.

It is clear that, relative to the levels of asbestos contamination, conditions in Libby today are much better than when the mine was in business. The piles of vermiculite around the export/expansion plant are gone, air emissions from the mill and processing operations no longer exist, and ambient air conditions in Libby have greatly improved over the last decade. However,

conditions that need to be investigated and remedied still exist in Libby. The results from the air samples collected by EPA in December indicate that unsafe levels of asbestos fibers still exist in some areas of the former screening plant/railroad loading station and the export/expansion plant.

EPA has already initiated discussions with W.R. Grace about conducting and/or paying for these clean-up actions. One of the 32 homes sampled in Libby also showed unsafe levels of tremolite-actinolite fibers. EPA is currently trying to determine the source of these fibers. EPA will then take steps to reduce these levels. We expect to have the results from the remainder of the samples collected in December by mid-March, and will announce our findings at that time. In summary, while it appears that conditions are better in Libby today than in the past, there are apparently existing local source areas that need to be eliminated. It is still an open question as to the significance of vermiculite in people's homes, yards, and gardens.

4. The Next Steps to Be Taken By the Federal Agencies Involved

The next big step to be undertaken in Libby is the implementation of the Community Medical Testing and Exposure Assessment that EPA and ATSDR will jointly conduct with assistance from the PHS. The outreach and education effort for this will begin in March 2000, with the actual medical evaluations scheduled to begin in April 2000. This is the key piece of the investigation to date, and it is urgent that the Federal Agencies involved see to its proper implementation. EPA and ATSDR have both committed to conduct this action under the above mentioned time-frames. If done successfully, this evaluation should also serve to help develop the

local medical infrastructure in Libby, so that residents can receive proper diagnosis, treatment, and care locally.

EPA, along with MDEQ, will continue to conduct its sampling investigations in and around Libby, and will begin clean up actions at the two former processing centers this Spring. As more information is gathered and more data becomes available, EPA will announce and discuss its findings publicly and take action accordingly. It is EPA's intent to identify all areas where unacceptable exposure to tremolite-actinolite asbestos are occurring and remediate them. EPA plans to test an additional 75 to 100 homes starting in late February. Ambient air sampling will continue through next Fall. Investigations as to the present physical condition of the mine and area surrounding the mine will be started as soon as the snow melts this Spring.

5. Coordination of Local, State, and Federal Efforts

Given the critical nature of the situation in Libby today it is imperative that the efforts of all the agencies involved be well coordinated. I can and will take steps to ensure that the agencies work together in a coordinated manner.

EPA and MDEQ have conducted several briefings and interviews with officials from the City of Libby and Lincoln County. In addition, EPA, ATSDR, MDEQ, the Montana Department of Public Health and Human Services, and PHS have met extensively with the County Medical Officer, hospital officials, and local physicians to exchange information about the investigations. Local medical resources will be used to a great extent in conducting the Community Medical Screening and Exposure Assessment, and have participated in the development of this project.

EPA and the other agencies involved will continue to communicate with local officials and medical personnel as the investigations progress.

EPA and MDEQ have helped to facilitate the formation of a Community Advisor Group (CAG), a citizen based group designed to better transmit, receive, and evaluate the information collected during these investigations. The group will serve to act as a forum to discuss and debate publicly many of the controversial issues surrounding the investigations.

The MDEQ has been participating jointly with EPA in this investigation since it was begun last November. MDEQ personnel have been involved with the investigation design and implementation, and will participate with EPA when clean up actions begin. The Montana Department of Public Health and Human Services has been integrally involved in the collection of current medical information, and has participated in the design of the Community Medical Testing and Exposure Assessment. This relationship will continue as this project evolves.

Coordination among the Federal Agencies involved is also paramount to the success of this project. The PHS has provided EPA a full-time physician to support our efforts, and has also provided other medical expertise. Because of the overlap in authorities, and to eliminate any duplication of efforts, ATSDR and EPA are jointly conducting their investigations in Libby when appropriate. To this end the two Agencies are now in the process of finalizing an Agreement on how the work will be conducted, and ensuring a sharing of information and resources. As a result, EPA has agreed to fully fund the Community Medical Testing and Exposure Assessment

while relying on ATSDR's expertise in its design and implementation. In addition, the agencies have agreed to coordinate their enforcement and cost recovery actions concerning W.R. Grace.

This concludes my testimony on the matter today. I want to assure you that I have personally charged my On Scene Coordinator with the directions discussed above, and he and I will stand fully accountable for the success of their implementation. Thank you for your time and consideration.